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GONODACTYLOIDEUS CRACENS N. GEN. N. SP., A NEW STOMATOPOD CRUSTACEAN FROM WESTERN AUSTRALIA



RAYMOND B. MANNING

*Department of Invertebrate Zoology, National Museum of Natural
History, Smithsonian Institution, Washington, D.C. 20560, U.S.A.*

ABSTRACT

Gonodactyloideus cracens, new genus, new species, is described for a single specimen taken in 80 m off the Dampier Archipelago. This new genus is similar to *Gonodactylus* in many respects, differing in having a much broader cornea.

INTRODUCTION

The stomatopod described below was sent to me for identification by A. J. Bruce of the Northern Territory Museum of Arts and Sciences. It proved to represent not only a new species but also a new genus, similar to *Gonodactylus* in many features. The

holotype has been deposited in the Division of Natural Sciences, Northern Territory Museum of Arts and Sciences (NTM).

I thank A. J. Bruce for allowing me to work with the specimen and Lilly King Manning for preparing the figure.

***Gonodactyloideus*, new genus**

Definition — Size small, total length of adult less than 35 mm. Rostral plate with single median spine. Cornea expanded laterally, broader than stalk. Anterior margins of lateral plates of carapace convex, extending anteriorly beyond base of rostral plate. Ischiomeral articulation of raptorial claw subterminal, dactylus of claw unarmed. Mandibular palp present. Articulated anterolateral plates present on abdomen. Posterior margin of sixth abdominal somite straight medially, not distinctly concave. Telson shape normal, with 3 pairs of marginal teeth, submedians with moveable apices. Dorsal surface of telson with median carina, carinae of marginal teeth, and 2 other pairs of longitudinal carinae lateral to the median. Proximal segment of uropodal exopod extending beyond articulation with distal segment; setation and spination of uropod normal; uropodal exopod and endopod lacking fixed spines on inner margin.

Type-species — *Gonodactyloideus cracens*, new species, by present designation and monotypy.

Etymology — The generic name is derived from the generic name *Gonodactylus* with the Latin suffix “-oideus,” having the form of. The gender is masculine.

Remarks — This new genus can be distinguished immediately from members of *Gonodactylus*, which it otherwise resembles in most details, by its broadened cornea, one of the features that differentiate the genera *Chorisquilla* and *Haptosquilla* (see Manning, 1969). The late R. Serène (1962) emphasised the importance of eye shape as a taxonomic character, and since then eye shape and external structure has proven to be an important feature in the higher classification of Stomatopoda (Manning, Schiff, and Abbott, 1984).

***Gonodactyloideus cracens*, new species**

Figure 1

Holotype — N of Dampier Archipelago, Western Australia, 19°50'S, 115°34'E, 80 m, coll. L. Bullard, (caught by Taiwanese pair

trawler), 19 September 1982, 1 female, holotype, NTM Cr. 000473.

Description — Rostral plate distinctly longer than broad, anterolateral angles of plate acute but rounded, slightly produced laterally. Ocular scales separate, erect, narrow, highest mesially. Raptorial claw slender, articulation of propodus and dactylus expanded in plane of claw, not inflated; dactylus slender, apex bent at distinct angle, propodus with single moveable spine proximally. Lateral process of sixth abdominal somite broader than that of seventh somite. Abdomen slender, abdominal width/carapace length index 694; anterior 5 abdominal somites unarmed, lacking carinae; sixth abdominal somite with 6 irregular carinae, each armed posteriorly. Telson slightly broader than long, dorsal area with 5 separate carinae: 1 median, 2 accessory medians, 2 anterior submedians, each armed posteriorly; marginal teeth sharp, each with dorsal carina; inner margin of submedian teeth each with short oblique carina basally, extending under faintly bilobed knob; denticles 14-15, 2, 0, intermediates carinate dorsally, carinae forming a Y; submedian teeth each with blunt ridge ventrally. Uropodal exopod with single line of long marginal setae, and with 10 graded spines on proximal segment, none strongly recurved, distal most overreaching distal segment of exopod; endopod with normal setation, setae rather long, and with sharp longitudinal carina dorsally; basal prolongation produced into 2 spines, outer longer, lacking lobes between them.

Color largely faded, body covered with small dark chromatophores, more or less arranged in bands. Claw marked with some red spots.

Measurements — Female holotype, only known specimen, total length 32 mm. Other measurements, in mm: carapace length 7.2; cornea width 1.5; rostral plate length 2.5; width 2.1; fifth abdominal somite width 5.0; telson length 4.2, width 4.4.

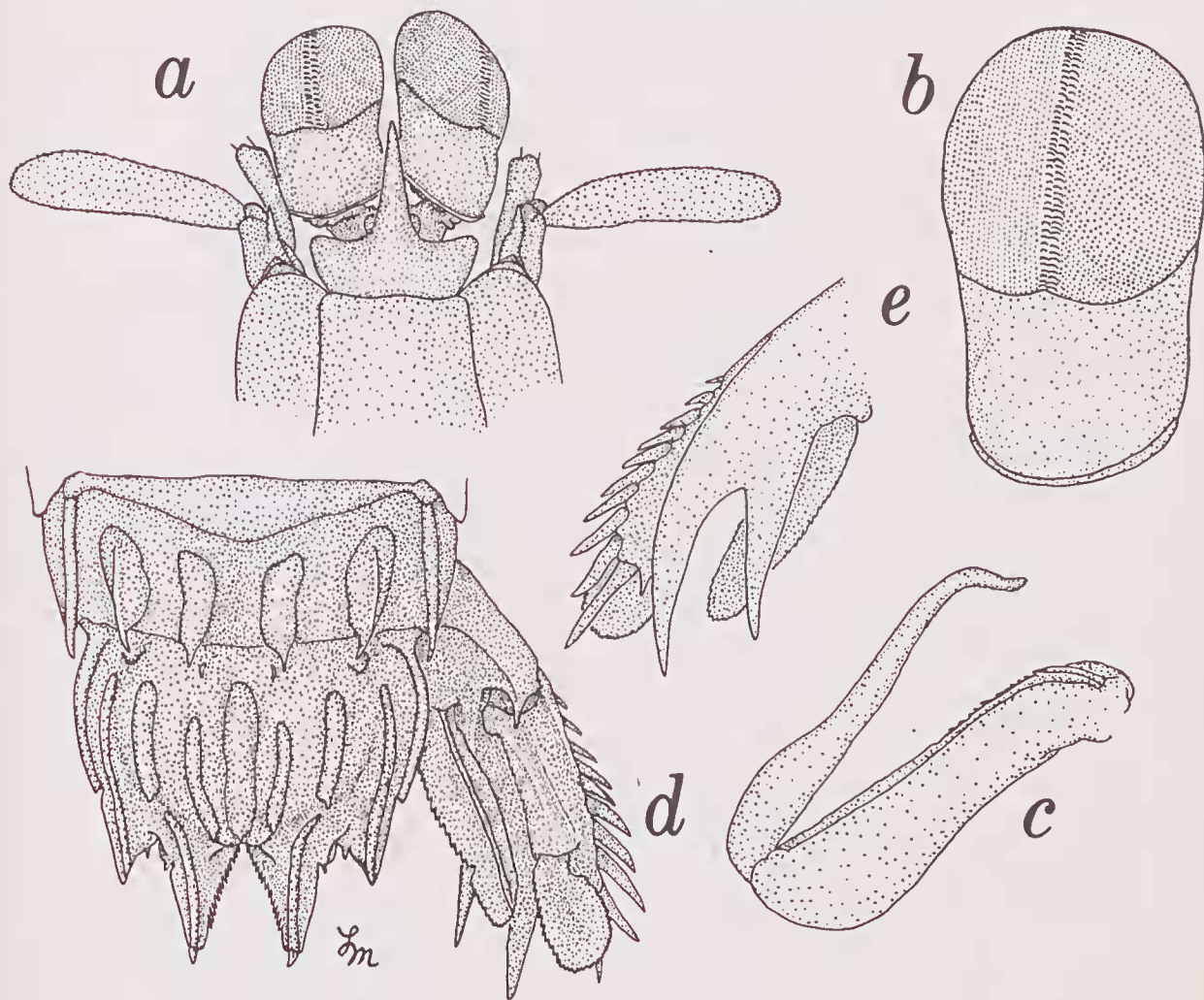
Remarks — At first glance this small species appears to be a *Gonodactylus*, but the broad eyes exclude it from that genus. In eye shape, *G. cracens* resembles some species of

Chorisquilla (see Manning, 1969: 157–159 for an account of that genus), but in that genus the rostral plate is trispinous, the lateral plates of the carapace do not extend anteriorly beyond the base of the rostral plate, the distal segment of the uropodal exopod articulates terminally with the proximal, and the telson is entirely different in shape.

In the key to gonodactylid genera in Manning (1969: 148), *Gonodactyloideus* keys out to *Gonodactylus*. Superficially, the

dorsal ornamentation of the telson resembles that found in some species of the *falcatus* complex of *Gonodactylus* (see Manning, 1978, for figures of some of these species), all of which have five mid-dorsal carinae on the telson, but in those species the anterior submedian carinae are unarmed, the lateral teeth of the telson are more distinct, and all have one or more lobes between the spines of the basal prolongation of the uropod.

Etymology — The specific epithet is from the Latin, "cracens," graceful, alluding to the overall appearance of this species.



LEGEND

Figure 1. *Gonodactyloideus cracens*, new genus, new species, female holotype, TL 32 mm: a, anterior part of body; b, eye; c, propodus and dactylus of claw; d, sixth abdominal segment, telson, and uropod; e, ventral view of uropod.

RESUMÉ

Un nouveau genre, *Gonodactyloideus*, de la famille Gonodactylidae, est créé pour une nouvelle espèce, *G. cracens*, recoltée à 80 m au large de l'Archipel Dampier. Le genre est voisin de *Gonodactylus*, duquel il diffère principalement par les cornées plus larges.

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